

circuit ( $m_2$ ) having a high amplification degree and a low signal to noise ratio that is less than about the minimum signal to noise ratio of said auxiliary amplifying circuit with a high signal to noise ratio;

a detector for detecting a change of object illumination;  
and

a switch activated by said detector for switching between said auxiliary amplifier with a high signal to noise ratio and said separate auxiliary amplifier having a low signal to noise ratio that is less than about the minimum signal to noise ratio of said auxiliary amplifying circuit having a high signal to noise ratio;

whereby said charge coupled device camera is switched to a separate auxiliary amplifying circuit when ambient illumination of said object is very low.

24. (New) The signal amplifying circuit system according to Claim 24 in which said auxiliary amplifier ( $m_1$ ) having a low degree of amplification and a high signal to noise ratio and said separate auxiliary amplifier ( $m_2$ ) having a high amplification degree and a low signal to noise ratio are incorporated into an existing AGC amplifier in said CCD camera amplifying and processing circuit.

25. (New) The signal amplifying circuit system according to Claim 23 in which said signal to noise ratio of said